	°	′	″		°	′	″
Jan. 26	6	26	35♀	occidentalior ☍	0	26	49
				et auſtralior		10	28
		31	56	diſtans ab eadem		26	52

Congreſſus planetarum obſervati 1747.

Jan. 13 mane	2	51	54♄	in horario			
		52	43♂	in horar. auſtral.		47	2
Dec. 6 veſp.	5	34	34♂	immerſit totaliter ſub limb. obſc. ☽			
				diſt. a cornu bor.		23	28
				tum lunæ diam.		32	53
	6	46	2♂	emerſit de ſub ☾ diſt. a cornu boreo ejuſdem.		29	24

LXIII. *Extracts of ſeveral Letters of* Mordach Mackenzie, *M. D. concerning the* Plague *at* Conſtantinople.

Dr. Clephane, *F. R. S. to the Rev. Mr.* Birch, *Secr. R. S.*

SIR, Golden-Square, Feb. 25, 1752.

Read March 5, 1752. BEFORE I tranſcribe my friend Dr. Mackenzie's letters relating to the late plague at Conſtantinople, it may not perhaps be improper to mention a few particulars concerning the plague in general, as I find them ſcatter'd up and down his former letters to me on that ſubject.

In

In a letter dated March 24, 1749, he obſerves, that, in his time, the plague, whether at Conſtantinople, Smyrna, or any other part of the Levant, has been moſtly ſporadic, ſeldom epidemical. That therefore the articles in our news-papers, which ſo often mention the plague raging violently, are almoſt always falſe.

At Conſtantinople, and all over the Eaſt, people, he ſays, ſhun the plague, and the infected, as much as we do; and every body, phyſicians as well as others, who have been with the ſick, or in places infected, are all obliged to perform forty days quarantine.

The Armenians and prieſts are the only people, who attend them; and they only to give them neceſſaries at a diſtance, or to perform the laſt functions of the church; and this the prieſt is obliged to do by his religion.

The European plagues are much more violent than the eaſtern; thoſe being really the Thucydidian, which ſweep all away; while theſe are only gentle corrections to put us in mind of mortality.

The doctor, in another letter, finds fault with the method uſed in England to prevent infection by ſhipping; "for, to what purpoſe (ſays he) keep ſhips "in Sandgate-Creek for weeks, and even months, "without landing and ſerening the goods? I hope "you will allow, there is little to be feared from the "bodies of men, who get in good health from Smyrna "to England, which voyage is ſeldom performed in "leſs than 7 or 8 weeks; which I preſume will be "thought too long for infection to remain in the "blood without producing ſome effect. Wherefore, "as all the danger is from the goods or cargo, greater

" care ought to be taken of this, and leſs of the men.
" Your nation differs much from Italy or Marſeilles,
" where a ſhip may, and often does, arrive in eight
" days; for which reaſon, tho' it be neceſſary to look
" after the men, as well as the goods, ſtill however
" they make a great diſtinction. You make none."

It is obſervable, that from the beginning to the *ſtatus* or *acme* of the diſeaſe, they almoſt all die: afterwards its violence begins to abate, and about the end of the ſeaſon moſt people recover.

The ſymptoms of the diſtemper are chiefly; irregular fits of heat and cold; ſhiverings; violent headach, and reachings, for the firſt three or four days; great anxiety about the *præcordia*, *&c.* both before and after the eruptions; a wild ſtaring countenance; ſweats for the moſt part about the head and breaſt only, at the ſame time the extremities cold; a dry parched yellow-furred tongue. The more violent thoſe ſymptoms are, the greater the danger; *et e contra.* Some are delirious, and raving; others to a great degree ſtupid and dull: both theſe are fatal appearances. Some die in 5 or 6 days; ſome outlive 20 days, and then die: ſome walk the ſtreets for many days, and afterwards die. Bleeding at the noſe is reckoned a ſalutary ſign.

A ſwelling in the throat is a common ſymptom; for which if you bleed, it proves almoſt always fatal: for it is ſo far from abating this ſymptom, that after it a greater difficulty of breathing enſues, and the patient ſeldom ſurvives it above 3 or 4 hours.

The phyſical writers are divided as to the expediency of bleeding in the plague, ſome contending for it warmly, others as warmly condemning it. The doctor

doctor diſtinguiſhes between the different ſtages of the diſtemper, and ſays, that as in the beginning, during the ebullition, bleeding may be of ſome ſervice, ſo when the diſeaſe is advanced, and eſpecially after the eruptions, it will prove fatal, as well as purging, or any other violent evacuation.

A moderate diaphoreſis ought always to be kept up.

To the buboes, parotides, *&c.* they commonly apply a roaſted fig with ſome white ſugar powder'd; and this they reckon the beſt ſuppurative.

They do not open the tumors, but leave them to break of themſelves.

They give the ſick cold water to drink, and order the cool regimen quite thro' the diſtemper.

Copy of Dr. Mackenzie's *firſt Letter concerning the late Plague at* Conſtantinople.

Conſtantinople, July 23, 1751.

" WE have at preſent the moſt violent plague, that has been at Conſtantinople in my " time, by all reports; for I know nothing of " it, as I live at the mouth of the Black Sea " for ſecurity; but, as I am informed, few or " none eſcape; which ſhews, that the malignity " is not yet come to its ſtate. They are all taken " the ſame way, with a ſhivering, and vomiting, a " violent head-ach, thirſt and fever, of which they " die the third or fourth day, rather in a ſtupor " than a delirium; and ſuch, as have the misfor- " tune to be near the infected perſon, are taken in " ſeven or eight days, tho' there are already many " inſtances to the contrary. I preſume many die

" of other diſeaſes, which are all laid to the account
" of the plague; for there is no other mentioned at
" preſent, and there is a very great conſternation
" among the people. The Greeks and Armenians
" ſuffer moſt, next to them the Jews. The Turks
" ſuffer leſs in proportion than other nations. The
" Franks have hitherto eſcaped, excepting one Jeſuit
" prieſt, who waited on the Chriſtian ſlaves of the
" grand ſignor's bagnio, and died three days ago."

Dr. Mackenzie *to Dr.* Clephane, *F. R. S.*

Dear Sir, Conſtantinople, Nov. 23. 1751.

Read March 5, 1752. I RECEIVED yours of the 9 of September on the 23 of October laſt; and had it arrived 24 hours ſooner, I had been very expeditious in anſwering: but as a courier goes to Vienna from Conſtantinople but once in a month, the 24 hours your letter came ſhort, make almoſt a month's difference.

You are pleaſed to ask me, if we can account from any apparent cauſes for the preſent violence of the plague? To which I anſwer, that, during the twenty long years I have lived in this country, here and at Smyrna, there has ſcarcely been a year, excepting three, in which the plague did not threaten more or leſs; and in all that interval I obſerved no other difference in the ſeaſons, than that the winters might begin more early, and continue ſomewhat longer, and with greater rigour; tho', by my thermometers, this difference never exceeded 5 or 6 degrees; which is no great difference here, where the

the ſouth and north winds make a difference of 15 to 20 degrees in 24 hours: ſo that I can't ſee any other apparent cauſe of the virulency of the diſeaſe this year, beſides the occaſion of greater communication. In the months of February, March, April, and May laſt, the diſtemper was ſo ſtrong at Cairo, as appears by letters from the Engliſh conſul there, that no doors were open'd for three months. In the mean time there arrived here in May laſt four ſhips loaden with Cairo goods; which goods and men being landed, ſpread the infection over all the city at once, after which, one convey'd it to another by contact.

The only apparent cauſe of the virulency in this caſe is, four ſhips arriving from Cairo, inſtead of one or two, at the ſame time; and if you pleaſe, you may add to this ſome little difference of the ſeaſons, mention'd in my letter to Dr. Mead, and a greater quantity of cucumbers, melons, and fruit, than uſual, upon which the poorer ſort of people feed.

However I don't believe the number of the dead any-ways equal to common report, for the reaſons following:

The Turks have no bills of mortality, but they reckon, that in and about Conſtantinople there are conſumed daily 20,000 killows of flour. Every killow is reckon'd to weigh 20 oques, and every oque is equal to 400 drachms, and 160 drachms thought ſufficient for a perſon for 24 hours, or one complete day, taking men, women, and children together. Wherefore one killow makes bread enough for 50 perſons *per* day; but the conſumption of bread in the months of July, Auguſt, and September, was 3000 killows ſhort: from which it is concluded, that

3000

3000 × 50 = 150,000 muſt have died of the plague, without making any allowance for the great number of people, that run away to Pruſa, Nicomedia, Adrianople, the iſlands, and ſuch as muſt have died of other diſeaſes in three months in a populous city of a million of ſouls, by the calculation of 20,000 killows *per* day.

The ſickneſs began very violent, which ſtruck a panic in all ranks and degrees of people, cauſing many to remove their quarters; and even the better ſort of Turks themſelves uſed greater precaution than uſual; by which means there were but two of their great men died: 'tis ſaid, four of the grand ſignor's ladies died; but this wants confirmation. Thus far I can aſſure you, that in the village where we lived, there died only ſixty perſons of the plague; and in the year 1740, which made no noiſe, there died in the ſame village of it 49 perſons. The French ambaſſador's palace next door to us in the village was infected; becauſe five of his people went at midnight to a bawdy-houſe, where the father Demetry, the mother and daughter, at the ſame time had the plague, and died of it afterwards all three; ſo that two of his excellency's ſervants were infected by them, one of whom died, and the other recover'd, and is ſtill living, after taking a vomit, ſome doſes of the bark mix'd with ſnake-root and Venice-treacle, by my advice.

Next I muſt obſerve to you, that there are two vulgar errors, with regard to the plague, eſtabliſh'd in this country. They ſay, that a plague which begins early, ends ſoon; which is falſe; for, in the year 1735, the plague began at Smyrna the

15 of February (by means of a veſſel, which convey'd it to Candia, as was ſaid) pretty hot, ſo that all the houſes in Frank-ſtreet were ſhut up in February; and it continued till the latter end of November.

Another vulgar error is, that the heat kills the plague at Smyrna, and the cold at Conſtantinople; which is very true with regard to Conſtantinople, but very falſe with regard to Smyrna: for proof look back to the year 1735, when the vigour of the malady ſhew'd itſelf moſt in the months of June and July, tho' ſo very hot, that ſome people were ſaid to die of the heat in going from the town to the villages near it: ſo that it is very certain the heat does not kill the plague at Smyrna, as is generally thought and ſaid.

I am ſomewhat ſurpriſed to find there ſhould be a general quarantine order'd in Holland, where there has been none ſince I have been in Turky; and more particularly, ſince there is not the leaſt appearance, or even ſuſpicion, of ſickneſs at any other ſcale in Turky, excepting that of Conſtantinople; where, by the by, there does not appear a Dutch ſhip once in three years.

Dr. Mackenzie *to Dr.* Mead, *F. R. S.*

SIR,

Read March 19, 1752. THIS is the only ſummer ſince I have been in Turky that I can ſay we have been without any plague. The air was very temperate, no heavy rains, high winds at N. E. from which point our Eteſian winds blow, commonly called

called *milhem* in the Turkiſh language. Fruits have not been ſo plenty, or of ſuch a good quality as uſual: few fevers of the intermittent kind, but not ſo regular as uſual in their ſymptoms; for they were ſeldom attended with any head-ach, the tongue not much charg'd, and the urine ſeldom made any ſediment of the lateritious kind; and if they were not taken in time, a yellow jaundice came upon them the ſixth or ſeventh day; and in the beginning of the fever, the patient ſeldom vomited bile as uſual, but rather a pituitous matter.

I have the honour of being,

SIR,

Conſtantinople, Oct. 29, 1750.

Your moſt obedient, and moſt obliged humble ſervant,

Mordach Mackenzie.

Dr. Mackenzie *to Dr.* Mead.

SIR,

Read March 19, 1752.

THE laſt, which I had the honour of writing you, accompanying ſome medals and intaglio's, went by the Thames in October 1750. I have ſent by the Boſphorus, Capt. Kennard, a ſmall box, with full direction, containing 50 medals, four intaglia's, one Baſilidian amulet, or προφυλακτήριον, with ΣΟΛΟΜΟΝ ΣΩΖΟΝ cut upon it. He has

has likewiſe on board a ſtone, with an inſcription, and three figures, *viz.* a mother, and two ſons, of whom ſhe takes leave at a funeral repaſt. The figures of the two ſons are ſomewhat damag'd; but the mother, with a palla covering her head and body, the chair without a back, or rather a ſtool with a cuſhion upon the ſeat, and the three-footed table, at which they ſit, are very complete, and well preſerved, as likewiſe the inſcription.

We have had laſt ſummer the moſt violent plague, that has been in this country (as it is thought) for the twenty years, which I have lived in it. Some ſay, that 150,000 ſouls have died of it in five months; but it is impoſſible to determine the number, as the Turks keep no regiſters of ſuch as die of this or any other malady.

The winter began laſt year very early in November. About the beginning of January the ſmall-pox was very frequent, but not mortal; being for the moſt part of the diſtinct kind. It continued to the latter end of March 1751, when malignant fevers began, and continued till the middle of May, when four ſhips arrived from Cairo with the plague on board. They no ſooner landed their goods and men, than it began to ſpread among the inhabitants, and got to a great pitch by the 10 of June, and extended more and more daily, till the middle of Auguſt; when, after a deluge of rain, thunder, and lightning, it was much abated; but it recover'd its ſtrength again about the beginning of September, which it retain'd till the middle of October, when, after ſome ſnow, and cold weather, it intirely ceas'd, and we are now under no apprehenſion from it for this winter. 'Tis true, ſome

accidents may happen in houſes, which were once infected, and not well purified, all winter long: but theſe are ſo rare, that they deſerve little or no attention.

I remember to have had the honour of writing to you my ſentiments of this diſtemper ſome years ago; and from all the obſervation I could make in the interval, I have no reaſon to change my opinion, *viz.* that it is brought from Cairo commonly; and that when once a houſe or ſhip is infected, it is very difficult to eradicate the *animalcula*, *ſemina*, *effluvia*, *miaſmata*, or whatever name is proper for the reliques or remains of it, which getting once into a *nidus*, lodge there, condens'd by the cold during the winter, and when rarefied by a certain degree of heat, they act upon bodies, which have a diſpoſition, as women and children moſtly, and ſo ſpread by contact only, without communicating any malignancy to the ambient air. Otherwiſe very few could eſcape; whereas we found this laſt time, and upon all ſuch occaſions, that whoever kept their doors ſhut, run no riſque, even if the plague were in the next houſe; and the contact was eaſily trac'd in all the accidents, which happen'd among the Franks. Comte Caſtellane had, for three years running, perſons attack'd in the ſame room, in the months of July and Auguſt, notwithſtanding all poſſible precaution us'd in cleanſing the room, and even white-waſhing it. At laſt, by my own advice to his excellency, grounded upon the above theory, he built a ſlight counter-wall; ſince which there has been no accident in that room, now five years ago.

I could give ſo many ſuch examples, as *delaſſare valeant Fabium.*

The

The patients were this year ſick at ſtomach, and troubled with vomiting and nauſea's for three or four days after they were infected, and before the eruption of the buboes, carbuncles, or tokens; and in about four days more after the eruptions they died, or ſhew'd good ſymptoms of recovery; ſuch as, the fever, with all its ſymptoms, decreaſing; the eruptions tending to maturation and ſuppuration, the nauſea ceas'd, and ſome appetite beginning.

I refer you to my letter to Dr. Clephane, for more upon this ſubject, and have the honour of being with the moſt profound reſpect,

SIR,

Conſtantinople, Nov. 23, 1751.

Your moſt obedient humble ſervant,

Mordach Mackenzie.

ΖΩΣΙΜΟΣ ΑΣΠΑΣΙΑΣ ΠΡΟΣΦΙΛΗΣ ΧΑΙΡΕ. ΜΑΡΚΟΣ ΑΣΠΑΣΙΑΣ ΠΡΟΣΦΙΛΗΣ ΧΑΙΡΕ.